AUG 1	9 2002					
*******************)-1449/45 Ad B (M		•	APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743/70003
THE STATE OF THE S	FEMATION	DIS	CLOSURE	FILING DATE:	March 4, 20	02
ST	ATEMENT B	Y A]	PPLICANT	APPLICANT:	Stephen D.	SENTURIA
Sheet	1	of	9	GROUP ART UNIT:		EXAMINER:

Examiner's	Cite	U.S. Patent Doc	ument	Name of Patentee or Applicant of Cited	Date of Publication or of issue
Initials #	No.	Number	Kind Code	Document of Cited Document MM-DD-YY	
君		3,553,364		Lee	01/05/71
13_		4,234,788		Palmer et al.	11/18/80
13		4,731,670		Allen et al.	03-15-1988
13		4,805,038		Seligson	02-14-1989
160		5,022,745		Zayhowski et al.	06/11/91
13		5,115,344		Jaskie	05-19-1992
水		5,164,688		Larson RECEIV	ED 11/17/92
As .		5,168,249		Larson RECEIV	12/01/92
k		5,175,521		Larson AUG 2 1 2	102 12/29/92
13		5,206,557		Roppio	04/27/93
10		5,212,582		Nelson Technology Cen	er 2600 _{05/18/93}
B		5,291,502		Pezeshki et al.	03/01/94
X.		_5,311,360		Bloom et al.	05-10-1994
15		5,353,641		Tang	10/11/94

FOREIGN PATENT DOCUMENTS

Evenine's	Cite	Fore	eign Patent Doci	ıment	Name of Patentee or Applicant of Cited	Date of Publication of	Translation
Examiner's Initials #	No.	Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YY	Translation (Y/N)
933		WO	98/41893	A1		09-24-1998	
D		wo	91/02991	Al		03-07-1991	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.	Translatio (Y/N)	
3		MICROMECHANICAL LIGHT MODULATOR ARRAY FABRICATED ON SILICON, K.E. PETERSEN, IBM Research Lab., Applied Physics Letters, Vol. 31, No. 8, 10/15/77, pp 521-523		

EXAMINER / 0//	DATE CONSIDERED // /
	DATE CONSIDERED
40 V V V V V	3///-5
	$\mathcal{L}(\mathcal{L}(\mathcal{L}))$
	2100

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

AUS 1	2002						
FORMATIO	A and B (N	1odifie	d)		APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743/70003
	ORMATION				FILING DATE:	March 4, 20	02
ST.	ATEMENT B	Y A	PPLICAN	NT	APPLICANT:	Stephen D.	SENTURIA
Sheet	2	of	<u> </u>	9	GROUP ART UNIT:		EXAMINER:

Examiner's	Cite	U.S. Patent Doc	ument	Name of Patentee or Applicant of Cited	Date of Publication or of issue			
Initials #	No.	Number	Kind Code	Document	of Cited Document MM-DD-YY			
230		5,392,151		Nelson	02/21/95			
龙		5,396,066		Ikeda et al.	03/07/95			
20		5,459,610		Bloom et al.	10-17-1995			
B		5,561,523		Blomberg et al.	10/01/96			
13		5,629,951		Chang-Hasnain et al.	05/13/97			
1/3		5,640,133		MacDonald et al.	06/17/97			
AB		5,646,772		Yurke MEC	EIVED 1/08/97			
AD		5,654,819		Goossen et al	08/05/97			
16		5,661,592		Bornstein et al.	2 1 2002 8-26-1997			
to		5,677,783		Bloom et al. Technolog	y Center Sahir 1997			
16		5,696,662		Bauhahn	12/09/97			
X3		5,739,945		Tayebati	01/14/98			
1/3/3		5,745,271		Ford et al.	04-28-1998			

FOREIGN PATENT DOCUMENTS

Evenine's	Cite	Fore	ign Patent Docu	ment	Name of Patentee or Applicant of Cited	Date of Publication of	Translation
Examiner's Initials #	No.	Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YY	(Y/N)
138		wo	01/11394	Al		02-15-2001	
the		wo	01/11419	A2	Godil et al.	15-02-2001	
The		wo	01/11410	A1	Thackara et al.	02/15/01	
M		WO	01/11396	A1		02-15-2001	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue	Translation (Y/N)
		number(s), publisher, city and/or country where published.	` ′
B		MINIATURE FABRY-PEROT INTERFEROMETERS MICROMACHINED IN SILICON FOR USE IN OPTICAL FIBER WDM SYSTEMS, J.H. JERMAN et al., IEEE 1991 372, International Conf. On Solid-State Sensors and Actuators 1991, pp 372-375	

EXAMINER	DATE CONSIDERED
	DATE CONSIDERED (S)
7/2/1/1	1 1/2/25
	$\mathcal{A}(\mathcal{C}/\mathcal{O})$

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

^{*}a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. , filed , and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

AUG	9 2001		•			
FOR PITO	-14404 and B (N	lodifie	d)	APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743/70003
	ORMATION			FILING DATE:	March 4, 200	22
ST	ATEMENT B	Y Al	PPLICANT	APPLICANT:	Stephen D.	SENTURIA
Sheet	3	of	9	GROUP ART UNIT:		EXAMINER:

U.S. PATENT DOCUMEN	rs	rs	n	١	1	F	1	V	H	ı	1	0	H	C)	ſ	r	١	N	ī	F	۲		Δ	>	P		2	J.	Ī	
---------------------	----	----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	---	--	---	----	---	--

Examiner's	Cite	U.S. Patent Document		Name of Patentee or Applicant of Cited	Date of Publication or of issue of Cited Document MM-DD-YY	
Initials #	No.	Number Kind Code		Document		
To		5,757,536		Ricco et al.	05-26-1998	
13		5,781,670		Deacon et al.	07-14-1998	
R		5,794,023		Hobbs et al.	08-11-1998	
As		5,808,797		Bloom et al. HECE	VED 09-15-1998	
1/2		5,836,203		Martin et al. AUG 2 1	2002 11-17-1998	
16		5,841,579		Bloom et al.	11-24-1998	

FOREIGN PATENT DOCUMENTS

Technology Center 2600

Examiner's Cite No.	Cite	Foreign Patent Document			Name of Patentee or Applicant of Cited	Date of Publication of	Translation
		Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YY	Translation (Y/N)
43		wo	01/42825	A1	Gutin	06/14/01	
150		EP	1 122 577	A2		08-08-2001	
13		EP	1 143 287	A2		10-10-2001	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's	Cite	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the	Translation					
Initials#	No	item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.						
B		Solgaard et al., "Deformable grating optical modulator," Optics Letters, Vol. 17, No. 9, May 1, 1992, pgs. 688-690.						
L,		Goossen et al., "Silicon Modulator Based on Mechanically-Active Anti-Reflection Layer with I Mbit/sec Capability for Fiber-in-the-Loop Applications," IEEE Photonics Technology Letters, Vol. 6, No. 9, September 1994, pgs. 1119-1121.						
B		SPECTRALLY SELECTIVE GAS CELL FOR ELECTROOPTICAL INFRARED COMPACT MULTIGAS SENSOR, MELÉNDEZ et al., Elsevier Science S.A., Sensors and Actuators 46-47 (1995) 417-421						
L		SILICON MICROMACHINED INFRARED SENSOR WIHT TUNABLE WAVELENGTH SELECTIVITY FOR APPLICATION IN INFRARED SPECTROSCOPY, D. ROSSBERG., Elsevier Science S.A., Sensors and Actuators 46-47 (1995) 413-416						
B		CONTINUOUS-MEMBRANE SURFACE-MICROMACHINED SILICON DEFORMABLE MIRROR, BIFANO et al., Soc. of Photo-Optical Ins. Eng. Opt. Eng. 36(5) May 1997, pp 1354-1360						

· · · · · · · · · · · · · · · · · · ·	
EXAMINER //	DATE CONSIDERED 0/
	DATE CONSIDERED 2-11. 1 -
12/1/1	7/656
	91907
	· · · · · · · · · · · · · · · · · · ·

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

AUS 1 8	in a		•			•	
FERMAND	A and B (N	1odifie	zd)		APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743/70003
INI	ORMATION	I DIS	CLOS		FILING DATE: March 4, 2002		
ST.	STATEMENT BY APPLICANT				APPLICANT: Stephen D. SENTURIA		
Sheet	4	of		9	GROUP ART UNIT:		EXAMINER:

Examiner's	Cite	U.S. Patent Doc	ument	Name of Patentee or Applicant of Cited	Date of Publication or of issue of Cited Document MM-DD-YY	
Initials#	No.	Number	Kind Code	Document		
76		5,847,859		Murata	12-08-1998	
73		5,870,221		Goossen	02-09-1999	
13		5,905,571		Butler et al.	05/18/99	
18		5,905,589		Tanaka et al.	/ED 05-18-1999	
20		5,920,418		Shiono et al.	07-06-1999	
13_		5,933,277		Troxell et al. AUG 2 1	2002 08/03/99	
26		5,949,568		Koo et al.	09/07/99	
10		5,949,570		Shiono et al. Technology Ce	nter 260 ₉₋₀₇₋₁₉₉₉	
14		5,953,161		Troxell et al.	09-14-1999	

FOREIGN PATENT DOCUMENTS

Examiner's Initials#	Cite No.	Fore	eign Patent Docu	ıment	Name of Patentee or Applicant of Cited	Date of Publication of	Tennelation	
		Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YY	Translation (Y/N)	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
君		MOCRO-ACTUATED MIRRORS FOR BEAM STEERING, GUSTAFSON et al., SPIE- Society of Photo-Optical Instrumentation Engineering, Vol. 3008, 1997, pp 90-99	
A		DESIGNS TO IMPROVE POLYSILICON MICROMIRROR SURFACE TOPOLOGY, BURNS et al., SPIE- Society of Photo-Optical Instrumentation Engineering, Vol. 3008, 1997, pp 100-110	
B		OPTICAL BEAM STEERING USING SURFACE MICROMACHINED GRATINGS AND OPTICAL PHASED ARRAYS, BURNS et al., SPIE, Vol. 3131, 1997, pp 99-110	
13		INVESTIGATION OF THE MAXIMUM OPTICAL POWER RATING FOR A MICRO-ELECTRO-MECHANICAL DEVICE, BURNS et al., Internat'l Conf. On Solid-State Sensors and Actuators 06/16/97-06/19/97, pp 335-338	

EXAMINER	Kello	DATE CONSIDERED 3/16/65

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

AUS 1	9 2002)		•	
FORMAT	and I	B (Modif	ied)		 APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743/70003
IN	INFORMATION DISCLOSURE				FILING DATE: March 4, 2002		
ST	'ATEMEN'	ΓBY	APPLI	CANT	APPLICANT:	Stephen D.	SENTURIA
Sheet	5	of		9	 GROUP ART UNIT:		EXAMINER:

211	PATENT	חחרוו	MENTS
U.S.	LWIGHT	DOCO	IATICITA I O

Examiner's	Cite	U.S. Patent Document		Name of Patentee or Applicant of Cited	Date of Publication or of issue	
Initials #	No.	Number	Kind Code	Document	of Cited Document MM-DD-YY	
B		5,966,235		Walker	10/12/99	
17		5,969,848		Lee et al.	10/19/99	
13		5,978,127		Berg	11/02/99	
16		5,991,079		Furlani et al.	11-23-1999	
Do		5,998,906		Jerman et al. RECE!	/FD 12/07/99	
19		5,999,319		Castracane	12-07-1999	
R		6,061,166		Furlani et al. AUG 2 1	2002 05-09-2000	
1/2		6,144,481		Kowarz et al	11-07-2000	
180		6,169,624	Bl	Godil et al. lectinology Ce	nter 2600 ₁₋₀₂₋₂₀₀₁	
13		6,172,796	B1	Kowarz et al.	01-09-2001	
M.		6,175,443	BI	Aksyuk et al.	01-16-2001	
Z		6,181,458		Brazas, Jr. et al.	01/30/01	
4/1		6,188,519	B1	Johnson	02-13-2001	
13		6,215,579	BI	Bloom et al.	04-10-2001	

FOREIGN PATENT DOCUMENTS

Examiner's Initials#	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited	Date of Publication of	Translation	
		Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YY	(Y/N)	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's	Cite	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the	Translation	1
Initials#	No	item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue	(Y/N)	-
		number(s), publisher, city and/or country where published.		╛
4		NONLINEAR FLEXURES FOR STABEL DEFLECTION OF AN ELECTROSTATICALLY ACTUATED MICROMIRROR,		7
999		BURNS et al., Air Force Institute of Technology, Dept. of Ele and Comp Eng., Wright-Patterson AFB,		١
-0/-	_ii	Ohio, SPIE Vol. 3226, 1997, pp 125-136	<u> </u>	ユ
7/2		SYNTHETIC SPECRA; A TOOL FOR CORRELATION SPECTROSCOPY, SINCLAIR et al., Applied Optics, Vol.		
16		36, No. 15 05/20/97, pp 3342-3348		ı

EXAMINER 1	DATE CONSIDERED/,
CHAMINER J	2////~
	2/1/2/25
	21910)

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

^{*}a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. ________, filed ________, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

OIP	TOTAL ST				•		
		lodifie	d)	APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743/70003	
			d) CLOSURE	FILING DATE:	FILING DATE: March 4, 2002		
ST	ATEMENT B	PPLICANT	APPLICANT:	APPLICANT: Stephen D. SENTURIA			
Sheet	6	of	9	GROUP ART UNIT:		EXAMINER:	

U.S. PATENT DOCUMEN	ITS
---------------------	-----

Examiner's Initials #	Cite	U.S. Patent Doc	ument	Name of Patentee or Applicant of Cited	Date of Publication or of issue of Cited Document MM-DD-YY	
	No.	Number	Kind Code	Document		
B		6,233,087	BI	Hawkins et al.	05-15-2001	
As	6,238,58		Bl	Hawkins et al.	05-29-2001	
*		6,243,194	Bi	Brazas, Jr. et al.	06-05-2001	
10		6,252,697		Hawkins et al. RECE	VED 06/26/01	
B		6,268,952	B1	Godil et al.	07-31-2001	
18		6,282,012	Bl	Kowarz et al. AUG Z	ZUUZ 08-28-2001	

FOREIGN PATENT DOCUMENTS Technology Center 2600

Examiner's Initials #	Cite No.	Foreign Patent Document		iment	Name of Patentee or Applicant of Cited	Date of Publication of	Translation	
		Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YY	(Y/N)	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

	T	OTHER ART — NON PATENT LITERATURE DOCUMENTS				
Examiner's Initials #	Cite No	item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.				
名		SYNTHETIC INFRARED SPECRA, SINCLAIR et al., Optical Society of America, Optical Letters, vol. 22, No. 13 07/01/97, pp 1036-1038				
B		ELECTROSTATIC EFFECTS IN MICROMACHINED ACTUATORS FOR ADAPTIVE OPTICS, HORENSTEIN, et al., Dept. of Aerospace and Mech. Eng., BU, Boston, MA, J. of Electrostatics, pp 69-81 (1997)				
13		ANALYSIS OF GRATING LIGHT VALVES WITH PARTIAL SURFACE ELECTRODES, FURLANI et al., J. Appl. Phys. 83 (2), 01/15/98, American Institute of Physics, pp 629-634				
K		POSITIONING, CONTROL, AND DYNAMICS OF ELECTROSTATIC ACTUATORS FOR USE IN OPTICAL AND RESYSTEMS, E.S. HUNG, 08/21/98 thesis Massachusetts Institute of Technology, 107 pages				
By		OPTICAL PHASE MODULATION USING A REFRACTIVE LENSLET ARRAY AND MICROELECTROMECHANICAL DEFORMABLE MIRROR, COWAN et al., AFRL/MLP, Optical Engineering, Vol. 37 No. 12, 12/123/98, pp 3237-3247				
13		LEVERAGED BENDING FOR FULL-GAP POSITIONING WITH ELECTROSTATIC ACTUATION, E.S. HUNG et al., MIT, Solid-State Sensor and Actuator Workshop Hilton Head Island, SC 06/08/98-06/11/98 pp 83-86				

	·
EXAMINER L 0/1	DATE CONSIDERED // _
1) 1/16	
	7/16/00
	- A V V

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

AUS 1'9	ZOT JE		•		•			
BORM PT	On 199/A and B (M	lodifie	d)	APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743/70003		
IN	IFORMATION	DIS	CLOSURE	FILING DATE:	FILING DATE: March 4, 2002			
S	TATEMENT B	Y A	PPLICANT	APPLICANT:	Stephen D.	SENTURIA		
Sheet	7	of	9	GROUP ART UNIT:		EXAMINER:		

Examiner's Initials #	Cite	U.S. Patent Doc	ument	Name of Patentee or Applicant of Cited	Date of Publication or of issue	
	No.	Number	Kind Code	Document	of Cited Document MM-DD-YY	
B		6,282,213	B1	Gutin et al. RECEIV	ED 08-28-2001	
为 为		6,284,560	Bl	Jech, Jr. et al.	09-04-2001	
B		6,288,824	B1	Kastalsky AUG 2 1	002 09-11-2001	
18		6,329,738	B1	Hung et al.	12-11-2001	
,				lechnology Cen	ter 2600	

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited	Date of Publication of	Translation	
		Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YY	Translation (Y/N)	

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
A		MEMS DEFORMABLE MIRRORS FOR ADAPTIVE OPTICS, BIFANO, et al., Dept. of Aerospace and Mech. Eng., BU, Boston, MA, Solid-State Sensor and Actuator Workshop Hilton Head Island, SC 06/08/98-06/11/98 pp 71-74	
B		DEVELOPMENT OF MICROELECTROMECHANICAL VARIABLE BLAZE GRATINGS, BURNS et al., Elsevier Science S.A. Conf. On Solid-State Sensors and Actuators, 1998, pp 7-15	
B		OPTICAL POWER INDUCED DAMAGE TO MICROELECTROMECHANICAL MIRRORS, BURNS et al., Elsevier Science S.A. Conf. On Solid-State Sensors and Actuators, Sensors and Actuators A 70 (1998), pp 6-14	
A		MICROMECHANICAL FIBER-OPTIC ATTENUATOR WITH 3 µ RESPONSE, FORD et al., IEEE, J. of Lightwave Technology, Vol., 16, No. 9 Sept. 1998 pp 1663-1670	
k		THE POLYCHROMATOR: A MEMS CORRELATION SPECTROMETER, HUNG et al., Microsystems Technology Laboratories Annual Report 1998,	
多		MEMS: RESEARCH AND APPLICATIONS IN MICROELECTROMECHANICAL SYSTEMS, HUNG et al., Poster Session Guidebook, 03/31/98, pp 1 and 4	

EXAMINER / dh	DATE CONSIDERED
	DATE CONSIDERED
	0/6/0)

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

OIPE AUG 19 2007	EW.		•				•			
	_\$/	nd B (Modifi	ed)		APPLICATI	APPLICATION NO.: 10/090,381 ATTY. DOCKET NO.: P00743/70				
FORM PTO 199/A and B (Modified) INFORMATION DISCLOSURE					FILING DA	TE: Mar	ch 4, 200)2	REC	EIVED
STA	TEME	NT BY A	PPLICANT	[APPLICAN'	Γ: Ste	phen D.	SENTURIA		2 1 2002
Sheet	8	of	9		GROUP AR	T UNIT:		EXAMIN	ER: Technolog	gy Center 2
				U.S	. PATENT DO	CUMENTS				
Examiner's Initials #	Cite No.	Cite U.S. Patent Document		Name o	of Patentee or A		of Cited	Date of Publication or of issue of Cited Document MM-DD-YY		
				FOREI	GN PATENT	DOCUMENTS	<u> </u>			
Examiner's Initials #	Cite No.	Fore Office/ Country	nign Patent Docu	iment Kind Code		of Patentee or A Docum (not neces	ent	of Cited	Date of Publication of Cited Document MM-DD-YY	Translation (Y/N)
Examiner's Initials#	Cite No	item (boo		urnal, seri: ber(s), pu	al, symposium, blisher, city an	catalog, etc.), d/or country wi	date, rele here publ	vant page(s), ished.	volume-issue	Translation (Y/N)
B		Technolog	, "Dynamic Spe gy <u>Letters</u> , Vol.	10, No. 10	October 199	8, pgs. 1440-14	42.			
B		SIMULATING Lockheed N	ELECTROSTRIC Martin Missiles	IIVE DEFOI and Space	RMABLE MIRRO , Smart Mater.	RS: I. NONLINEA Struct. 8, (1999)	R STATUS 9), 07/26	<u>s analysis,</u> F 5/99	iOM et al.,	
A		SIMULATING Lockheed A	ELECTROSTRIC Martin Missiles	TIVE DEFO	RMABLE MIRRO , Smart Mater.	RS: IL NONLINE Struct. 8, (1999)	AR DYNAM 9) , 07/26	MIC ANALYSIS 5/99, 07/26/99	, HOM,	
A		POLYMERIC NETWORK,	TUNABLE OPTICALEE et al., IEEE	AL ATTENLE Photonic	JATOR WITH AN s Tech. Ltrs, V	OPTICAL MONITOR OF THE PROPERTY OF THE PROPERT	ORING TA	AP FOR WDM 1 9, pp 590-592	RANSMISSION	
A		MODELING, DESIGN, FABRICATION AND MEASUREMENT OF A SINGLE LAYER POLYSILICON MICROMIRROR WITH INITIAL CURVATURE COMPENSATION, MIN et al., Elsevier Science S.A., Sensors and Actuators 78 (1999) 8-17								
B		REAL TIME OPTICAL CORRECTION USING ELETROSTATICALLY ACTUATED MEMS DEVICES, HORENSTEIN, et al., Dept. of Aerospace and Mech. Eng., BU, Boston, MA, J. of Electrostatics, 1999, pp 69-81								
to		SURFACE MICROMACHINED SEGMENTED MIRRORS FOR ADAPTIVE OPTICS, COWAN et al., IEEE J. of Selected Topics in Quantum Electronics, Vol. 5, No. 1, Jan/Feb. 1999, pp 90-101								
13		MICROELEC Quantum E	IROMECHANICAI lectronics, Vol.	L DEFORM. 5, No. 1, 1	ABLE MIRRORS, Jan/Feb. 1999,	BIFANO et al. pp 83-89	, IEEE J.	of Selected	Topics in	
EXAMINER	<u>A</u>	bell	1			DATE CON	SIDER	3/16	105	·

EXAMINER	Jolly	DATE CONSIDERED 3/16/25
		

considered. Include copy of this form with next communication to applicant.

^{*}a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. _ , and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

	9/A	and B (Mod	dified)		Approx					
H H	FORMA	ATION I	TISO IDSIC	nr	APPLICATION NO.	: 10/090,381	ATTY.	DOCKET NO.:	P00743	
ST	ATEM	ENT BY	APPLICAL	KE VT	FILING DATE:	March 4, 20	02	ŘĒ	CEN	Æ
					APPLICANT:	Stephen D.	SENTUR	JA AU	G 2 1	200
Sheet	9	O	f)	GROUP ART UNIT:		EXAMI		logy Cen	iter
	7			U.S	PATENT DOGUME					
Examiner's Initials #	Cite	U	.S. Patent Docu	ment	PATENT DOCUMENT					
	No.	1	Number	Kind Code	Name of Patentee	or Applicant of cument	of Cited	Date of Publi	cation or o	or of issur
				Code	 			MM-	Document DD-YY	it
	TT			FOREIG	N PATENT DOCUME					_
Examiner's	Cite		ign Patent Doc	ument	1					
Initials#	No.	Office/ Country	Number	Kind	Name of Patentee Doc	ument	f Cited	Date of Publication of	T	
				Code	(not ne	ecessary)		Cited Document	Transl (Y/	
aminer's	Cite	Include						MM-DD-YY	 	
itials#	No	item (book	ne of the author , magazine, jou	(in CAPITA	L LETTERS) title of the	e article (when	2 approprie		<u> </u>	
b	I Di	ESIGN AND P			ICI, CILV ADDIOR COLLEGE		" P46431. 1	/Ollime-iceus	Translat (Y/N	
9	Dr	MPLITUDE M 63-70	ODULATION, CI	IUNG et al.,	Sensors and Action	ATOR ARRAY	OR PHASE A	ND	, , , ,	
	1 A 1	DESIGNI DAG				- J - LISOVICE 3	cience S.A.	1990 1		
5	YA	RIABLE GRA	TINGS FOR OPT	n. Eng., BU,	TION IN MULTILAYER SUI Boston, MA, Micromec	h. Microeng.	ACHINING,	MALI et al.,		
1	DIE	FEDERATION	Pr. Ling. 38(3)	002-557, (Ma	urch 1999) Soc. of Photo	ACNETIC SIMI	LATION AN	D.DESIGN.		
3	HO	RENSTER	V, et al., Dept. of	TION SENSOR	FOR PLANAR MEMS STRI and Mech. Eng., BU, B	UCTGURES WIT	Eng. pp 552	2-557		
2	I EXT	ENDING				,	Isevier Scie	motion, ,	T	
1	Mic	roelectrom	echanical Syste	me ual 0 V	UNED ELECTROSTATIC	ACTUATORS L	IIDIO -			
3	ABE	RRATION CO	MPENSATION 2	MACHINED C	ONTINUOUS-MEMBRANE	DEFORMAN				
1 .	DEV	ELOPMENT C	E MICROELECTE	OMECHANICA	ONTINUOUS-MEMBRANE Oplied Optics, Vol. 38, 1	Vo. 1, 01/01/9	9, pp 168-1	76		7
7/	MICR	O-FI FCTRO	pr. of Aerospac	e and Mech.	Eng., BU, Boston, MA.	S FOR PHASE M	MOTTALUQUE		_	\dashv
5	1 7	nology, De	pt. of Ele and C	ARIABLE BAL	Eng., BU, Boston, MA, ZE GRATINGS, BURNS right-Patterson AFB, C	et al., Air Ford	e Institute) f		
3	Tech				"But Fatterson AFB. C	hio. pp 55.60		vi		\neg
AMINER	1 ech	eM.						1	- 1	- 1

		-			_				
1449/A a	nd B (Modif	fied)	APPLIC	ATION NO.: 10/090,381	ATTY. DOC	KET NO.: P00743.	789930	S.	
INFORMATION DISCLOSURE		FILING	FILING DATE: March 4, 2002 CONFI		NFIRMATION NO.: 5/89				
MEN'	Г ВҮ АР	PLICANT	APPLIC	APPLICANT: Stephen D. Senturia.					
reet of G			GROUP	ART UNIT: 2633	EXAMINER	: Not Yet Assen	d lomas	City	
			U.S.	PATENT DOCUMENTS					
Cite	U.S. Patent Docume		ient	Name of Patentee or Analican			on or of is	sue	
No.			Kind Code	Document	i oi Chea	of Cited Do	cument		
1	6,241,84	12	B1	Gudeman	-	06/26/2001	-		
2	6,141,13	39		Furlani et al.) BE	10/31/2000			
3	6,108,11	7		Furlani et al.	A	08/22/2000			
4	6,004,91	2		Gudeman		12/21/1999			
5	5,233,45	6		Nelson	2	08/03/1993			
6	5,202,78	35		Nelson #	20	04/13/1993			
7	4,252,69	7			3 111				
		= -		8	-				
						Datase	r -		
Cite No.	Office/	eign Patent Docur Number	Kind	Name of Patentee or Applican Document (not necessary)	t of Cited	Publication of Cited Document	Transl (Y/		
8	EP	1 014 143	Al	Eastman Kodak Company					
							-		

			<u> </u>						
Cite	Include	OTHER A	RT - NON	PATENT LITERATURE DOCUM	MENTS				
No	(book, m	nagazine, journal,	serial, sympo	sium, catalog, etc.), date, relevant pa	ge(s), volume-	, title of the item issue number(s),	Transla (Y/I		
						•			
	1 11								
4	Pelle	'		DATE CONSIDERED	3/16	105			
	Cite No. Cite No. Cite No. Cite Cite No.	Cite No.	Of U.S. Patent Document	MATION DISCLOSURE	MATION DISCLOSURE MENT BY APPLICANT of Of U.S. PATENT DOCUMENTS Name of Patentee or Applican Document No. Number Cite No. Number Cite 1 6,241,842 B1 Gudeman 2 6,141,139 G,108,117 Furlani et al. 5 5,233,456 Nelson 6 5,202,785 Nelson FOREIGN PATENT DOCUMENTS Cite No. Office/ Country Number Code Tother ART — Non PATENT LITERATURE DOCUMENTS OTHER ART — Non PATENT LITERATURE DOCUMENTS Non Include name of the author (in CAPITAL LETTERS) title of the article (whook, magazine, journal, serial, symposium, catalog, etc.), date, relevant problisher, city and/or country where publisher.	MATION DISCLOSURE MENT BY APPLICANT of U.S. PATENT DOCUMENTS U.S. PATENT DOCUMENTS Name of Patentee or Applicant of Cited Document Number Code 1 6,241,842 B1 Gudeman Furlani et al. 4 6,004,912 5 5,233,456 Nelson 6 5,202,785 Nelson FOREIGN PATENT DOCUMENTS Cite No. Office/ Country Number Cite No. Office/ Country Number Code Toreign Patent Document Name of Patentee or Applicant of Cited Document Nelson Nelson Nelson FOREIGN PATENT DOCUMENTS Name of Patentee or Applicant of Cited Document Nelson Toreign Patent Document Name of Patentee or Applicant of Cited Document Country Name of Patentee or Applicant of Cited Document Country Name of Patentee or Applicant of Cited Document Cite Document Cite Document Name of Patentee or Applicant of Cited Document Country Name of Patentee or Applicant of Cited Document Cite Document (not necessary) Document Office/ Code Office/	MATION DISCLOSURE MENT BY APPLICANT Of	MATION DISCLOSURE MENT BY APPLICANT of GROUP ART UNIT: 2633 EXAMINER: Not Yet Assessed U.S. PATENT DOCUMENTS U.S. PATENT DOCUMENTS LIS. PATENT DOCUMENTS U.S. Patent Document Number Kind Code 1 6,241,842 B1 Gudeman GROUP ART unit et al. 1 6,241,842 B1 Gudeman 3 6,108,117 Furlani et al. 4 6,004,912 Gudeman 4 6,004,912 Gudeman 4 6,004,912 Gudeman Furlani et al. D 08/22/2000 1 12/21/1999 5 5,233,456 Nelson Nelson Nelson Relson Rels	

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[•]a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. ___, filed ___, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

FORM PTO-1449/A and B (Modified)	APPLICATION NO.:	10/090,381	ATTY. DOCKET NO.: P00743.70003.US
INFORTATION DISCLOSURE	FILING DATE:	March 4, 2002	CONFIRMATION NO.: 5189
STATEMENT BY APPLICANT	APPLICANT:	Stephen D. Senturi	a
DEC 2 2 2003 & Sheete 1	GROUP ART UNIT:	2633	EXAMINER: Not Yet Assigned
The said			· ·

MAURO			0.5.	PATENT DOCUMENTS	
Examiner's	Cite	U.S. Patent Do	cument	Name of Patentee or Applicant of Cited	Date of Publication or of issue
Înitials	No.	Number	Kind Code	RECEIVED	of Cited Document MM-DD-YYYY
. 13	Pi	5,212,582		Nelson	05-18-1993
/ 2	P2	5,392,151		Nelson DEC 2 9 2003	02-21-1995
13	P3	6,072,620		Shiono et al.	06-06-2000
4	P4	6,088,148		Shiono et al. Furlani et al. Technology Center 260	J ₀₇₋₁₁₋₂₀₀₀
AS	P5	6,130,770		Bloom	10-10-2000
3 3	P6	6,144,481		Kowarz et al.	11-07-2000
13	P7	6,625,342	B2	Staple, et al.	09-23-2003
3	P8	6,636,658	B2	Goodman, et al.	10-21-2003
TB	P9	6,664,706		Hung, et al.	12-16-2003

FOREIGN PATENT DOCUMENTS

Examiner's	Cite	Fore	ign Patent Docum	ment	Name of Patentee or Applicant of Cited	Date of Publication of	Translation
Initials	No. Office/ Country Number Kind Code	Document (not necessary)	Cited Document MM-DD-YYYY	(Y/N)			
	<u> </u>						

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's	Cite	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item	Translation
Initials	No	(book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s),	(Y/N)
-	<u> </u>	publisher, city and/or country where published.	
*	P10	Copending patent application serial no. 09/975,169, filed on 10/11/2001 by Deutsch et al.	
B	Pll	Copending patent application serial no. 10/090,380, filed 03/04/2002 by Hung et al.	
	1		T
	1		1 1

EXAMINER / 0.0	DATE CONSIDERED / /
1201/11)	2/16/05
	21000

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.